

emissaries, and seditious pamphlets inundated the land.

Such was the situation of our affairs with Britain last fall. Its favorable change is to be attributed to three causes: The election of Mr. Madison, the continuation of the Embargo, and the defeat of the British in Spain. The Ministry has fondly anticipated the election of a President who would immediately repeal the embargo laws, renew our commercial intercourse, and submit to their violations of our rights. Their friends in the Senate and throughout the Union, had assumed them of the election of a new President, and that the people would submit to the laws, and the many evasions they had arranged, gave a color to their pretences. But to their confusion, when Congress met, they found that, instead of a repealing act, an enforcing one was passed—the election of Mr. Madison was ascertained, and the masterly report of Mr. Campbell had convinced them, that we were determined to vindicate our rights. Then they found that they had been deceived—for at the time that Oakeley was sent to America, the embargo laws were not repealed, and the seditious doings of the Massachusetts legislature, and Mr. Gore's exertions for his own election, were not known.

The British Parliament assembled in January. Lord Grenville proved, unanswerably, the impartiality of our government, and the perfidy of Canning in giving false information, and in keeping out of sight, letters that he had sent to the Editors of the papers in Boston, to affect our elections. He shewed the unjustness of the orders in council: that they were contrary to the laws of nations, and reprobated the insulting address of Canning to our minister—a large and respectable minority called with him on the king, to remove these odious measures. In the House of Commons Mr. Whitbread moved a petition to his majesty, to adopt conciliatory measures towards America—Mr. Madison's election, the continuance of the Embargo and the defeat of the British in Spain, added to unanswerable arguments of the Lords and Commons, convinced them of the unjustness of "General Pickering" & Co's statements, and the minister, to secure his place, was obliged, in the House of Commons, to promise better treatment to Americans.

Americans! Britain is prostrate at your feet; she has convicted herself of falsehoods and treachery. Your Embargo has produced its desired effects, notwithstanding the exertions of the Catalines of your country to defeat it. Rally around the standard of your country. Frown into contempt the wretch who have done all in their power to defeat the measures of your government, and who now claim the merit of the good effect which those measures have produced. Frown them to silence, and say to their leader, Go thou Judas Iscariot to thy farm, and hang thyself!

COLUMBIANUS.

To Messrs. Everett and Monroe, Editors of the Boston Patriot.

GENTLEMEN,  
His Excellency Mr. Adams, late President of the United States, having expressed in the Boston Patriot of yesterday, a desire that I should publish copies of my letter to the Secretary of State, dated Nantasket Road, October 1, 1798, and of the letters of Mr. Talleyrand to myself, together with his assurances communicated by me to the President, in conversation—in compliance with the President's request, I now send you the copies referred to, and shall transmit the "assurances," in time, for publication.  
Your ob't. serv't.

E. GERRY.

Cambridge, 27th April, 1809.

Extract from the letter of Ch. Mau. Talleyrand, to Mr. Gerry, Envoy of the United States, dated Paris, July 22, 1798.

"You repeat to me that the government of the United States has always been disposed to terminate, amicably, the differences which subsist between the two Republics. This fresh assurance, at a time when hostile demonstrations have just been made, could not but temper their effect. But let a frank, candid and truly amicable act, speedily realize those dispositions. Far from entering into the answers of the President to the addresses which have been presented to him from different parts of the U. S. whatever they may be, I would fain behold in his expressions, nothing but a political expedient. I do not, thence, judge less favorably of the true intentions, which you profess in his name, and I would not have engaged you to warrant the success of the first proof, which he will render of them, if the Executive Directory, which was ready to receive you, had not made a fixed determination upon the subject. A negotiation may therefore be resumed even at Paris, where I flatter myself you have observed nothing but testimonies of esteem, and where every envoy who shall unite your advantages, cannot fail to be well received.—Moreover, I know not, sir, why you tell me that it would be requisite to top from this negotiation, every preliminary respecting a loan, and explanations on the subject of the speeches delivered. Be pleased to read over again the propositions which I transmitted to you on the 30th Priaral, [June 18] they contain all the ideas of the French government; and you will not find in them a word which justifies your recurring to those two questions. An odious intrigue had got possession of them; the dignity of the French government could not permit this mixture; and it did not wish that views, as pure as its own, should be associated therewith hereafter. As to the preliminary measures, which you suggest, sir, the government has already your desire. By information which it has just received, it indeed learns, that violence has been committed upon the commerce and citizens of the United States in the West-Indies, and on their coasts. Do it the justice to believe, that it needs only to know the facts, to display acts contrary to the laws of the Republic, and its own decrees. A remedy is preparing for it, and orders will soon arrive in the West-Indies calculated to cause every thing to return within its just limits, until an amicable arrangement between France and the United States, shall re-establish them respectively in the enjoyment to their treaties.

To Mr. Gerry Envoy of the U. States.  
Presuming, sir, that you have not yet embarked, I address to you a decree of the Executive Directory, wherein you will find a part of the measures, which I announced to you the fourth of this month. Its solicitude will not be confined to that. Neutral in general, will have reason soon to be convinced of its firm attachment to the principles to which it is desirous that all the maritime nations might agree. It depends upon the United

States in particular, to cause every misunderstanding immediately to disappear between them and the French Republic.

Accept, Sir,

The assurance of my perfect consideration.

(Signed) CH. MAU TALLEYRAND.

Extract from a memorandum containing the substance of a conference with the Dutch Minister the 25th of July, 1798

Just before dinner, the Dutch minister called on me and said, he had received from Mr. Talleyrand, a printed copy of his letter to me, dated 24th Messidor, (12th July) that the Dutch government took a friendly part in the disputes between France and the United States, and that he came to offer his services, and the mediation of his government, who had authorized and instructed him on this head.

I answered, that the conduct of Mr. Talleyrand, in publishing his letter to me, had an hostile appearance; that if a mediation could be supposed necessary, it must be offered to the government of the U. States: I had no authority to accept it: that if the government of France was sincere in its declaration, made through Mr. Talleyrand, its minister, all that was wanting was to open a negotiation; for he had expressed a desire to show by treaty how well disposed France was to put an end to these disputes; that the government of the U. States was so reasonable, and just in its demands, that it could not fail to evince a good disposition to reconciliation, that the etiquette of setting on foot a negotiation appeared at present to be the only embarrassment; more especially as the principal objection to a negotiation had ceased, this government having relinquished all claims of loans and reparations on account of the President's speeches.

Extracts from the letter of Mr. Gerry to Timothy Pickering, Esq. secretary of State, dated Nantasket Roads, 1st October, 1798

When I left the United States in August, 1797, the citizens in general appeared to be earnestly desirous of a reconciliation with France, on terms consistent with the honor, interest, and welfare of the two republics; these, being free from claims and controversies in regard to territory, boundaries, and many matters which embroil states, and from competitions relative to their productions, manufactures, and commerce, had a mutual and manifest interest in the renewal of their commercial and friendly intercourse with each other.—Nature seemed to have entitled the U. States in their remote situation to the peaceable pursuit of their industry, by means whereof, in its various branches their wealth and power were rapidly increasing; and to an exemption from the conflicts of Europe; which, involving them would check their population, drain their resources, and ensure their poverty. On a candid investigation then of the causes of the unhappy differences between the two governments, on a disposition to correct errors, to which all governments are more or less liable, and on their mutual resolution to reciprocate justice, the success of the mission was conceived to depend; and as this temper marked the plan of pacification adopted by the government of the U. States, there was a rational prospect of success.

On the 26th of July, I left Paris; and from the best information which I could obtain relative to the disposition of the executive directory (for I never had any direct communication with them) they were very desirous of a reconciliation between the republics. Every impediment to my departure had been adopted by the French ministry; and he would have prevented it, had he succeeded in his plan of an epistolary discussion: his object was, as I conceived, to gain time for ascertaining, whether the U. States were then disposed to a treaty; of this he manifested doubts, being persuaded that their resentment was too great to admit of it. He seemed also to apprehend, that in consequence of the incredible exertions of G. Britain, and the unequivocal evidence she had given of her ability to defend herself, they were inclined to avenge their injuries, by an alliance with her; and that should France come forward with overtures or the plan of a treaty, she would fail therein, and compromise her honor. I was nevertheless of opinion, that should France be just and liberal in her measures, the government of the U. States would still meet her on the ground of accommodation. My judgement was the result of their instructions; for I had never received any official intelligence since my departure from America: I have therefore uniformly inculcated that sentiment.

Having been thus in a situation, wherein, amidst a series of events and embarrassments I have invariably pursued what appeared to me the honor, interest and welfare of my country, and being guided by the sense of the government, as far as I could ascertain it. If the door is still open to peace, the establishment of it must be an happy event to the United States, as it will exempt them from calamities, which notwithstanding desultory appearances, will with short intervals probably continue for half a century, to exhaust and depopulate Europe.

From the Boston Chronicle.

#### REPRESENTATIVE ELECTION.

The Republicans of Massachusetts, so far as we have heard, (excepting 6 or 8 towns) have been faithful to the cause of truth and rational liberty. Our friends in the country may rest assured that we do not give up the expectation of having a Republican majority in the next House of Representatives. If the Republican towns yet to be heard from, act with the same firmness as Wilbraham, and choose their full constitutional number, success is certain: Let every Republican Representative determine to be in Boston the day preceding the election, and all will yet be well, federal statements of nett gain, &c. to the contrary notwithstanding.

We understand that four vessels arrived at Bristol, (R. I.) the last week, from the Havana, full of French passengers, the unfortunate sufferers by the late disturbances at that place.—N. Y. Pub. Advertiser.

The total votes given in for Governor of Connecticut at the late election were  
For Jonathan Trumbull, Fed. 14,650  
Asa Spalding, Rep. 8,150

Fed. Maj. 6,500  
The legislature met at Hartford on the 4th inst. and chose Lyman Law Speaker of the lower House. The Council is federal of course.

The Boston papers state the federal gain of Representatives in 160 towns, at eight. The Senate will consist of 22 federalists, and 15 republicans.

British vessels are continually arriving in the United States from England, with various merchandise which are ultimately destined to Nova Scotia and Canada, to take home ship timber, masts &c. Between 5 and 600 ships are said to be employed in this business. Bost. Cent.

#### AARON BURR.

Advices are said to have been received from London, by the arrival of the Brig Levant, stating that this profligate Traitor left that city, sometime in the month of March last, and was waiting at one of the out ports for the sailing of a ship bound for the United States, on board of which he was to take his passage—we can hardly credit the remission, conceiving his temerity not quite so inflated as to venture on a step so very outrageous, he has surely by his intrigues and treason, insulted the Union sufficiently without adding to the measure of his infamy.

We give this information without absolutely vouching for its authenticity, however we shall endeavor to sift the report, and in the event of learning the name of the vessel, shall think it our duty to put as well the government, as the citizens at large on their guard. Demo. Press.

WASHINGTON, May 9.

The frigate John Adams, Capt. Evans, left the Navy Yard at this place on Tuesday last, and proceeded down the River. The Essex is expected to sail in a day or two.

NORFOLK, May 19.

Captain Goodwin arrived here yesterday in 16 days from St. Bartholomews, informs, that on the morning of the day on which he left that place, Adm. Cochrane, with two line of battle ships, two frigates and a sloop of war, anchored in the harbor, having in company a French 74, a prize, one of the squadron that made its escape from the Saints which he captured a few days before after a running fight to the northward and eastward of Samarara. The remainder of the French ships escaped owing to their superior sailing.—The only damage the prize ship received was a few shot holes in her hull. Herald.

NEW YORK, May 16.

A gentleman who arrived here in the brig Jane from St. Bartholomews, informs, that Admiral Cochrane had taken two of the French ships of the line that made their escape from the Saints. The other one made her escape by superior sailing.

Captain Renegan, of brig Clio, arrived at Philadelphia, in 16 days from St. Jago de Cuba, brought with him 45 passengers, chiefly women and children, being part of the French inhabitants ordered off by the Spaniards; 2000 of whom had sailed for the Mississippi in vessels hired for that purpose. He informs that business was dull, owing to the great emigration of the French; that flour was selling at 10 dollars, clear of duty.

#### LATEST FROM EUROPE.

A postscript to a letter from St. Bartholomews, dated the 28th of April, contains the important news which follows:

"I open my letter to say that by a vessel yesterday from Liverpool, we have news to the 28th ult. [8 days later than by the Ann] by which it certainly appears, hostilities have commenced between Austria & France, and that peace between Russia and Britain is before this supposed to have taken place." N. Y. Gazette.

#### THE ENQUIRER.

RICHMOND, MAY 23, 1809.

#### IMPORTANT IDEA.

A most rational reflection is said to have fallen from the lips of a Federal member of congress, who was in this city a few days since. Even admitting that the President's message should not hold out any assurances of an adjustment of affairs with France—Why go to war with her—or why change our attitude as to her—at this time? She has given us a species of pledge, that she would take off her decrees, if Britain would rescind her orders—Well, Britain has rescinded their orders as to the U. S.—Let us then see whether France will comply with this pledge; let us give her an opportunity to do it.—The interposition of Congress under such circumstances would be, in every point of view, ill-timed & premature—it would be possibly taking a step which might thwart the negotiation—it might be tying up the hands of the President of the U. S. in the prosecution of a matter, which might possibly be in a favorable train of adjustment.

The length of the present session of Congress will materially depend upon the discussion of a war with France—Exertions may be made to press this measure. When the Essex Junco and the other oppositionists, shall assemble at Washington, they will hold caucuses—compare notes—and if they find their strength great enough to command a respectable vote, they will at all events "Cry havoc, and let slip the dogs of disputation."

#### Extract of a letter to the Editor.

"For some time past I have intended writing you, and should have done so, but for the expectation of seeing you before Congress met.

"Attempts will be made, I am told, in consequence of the favorable prospects of adjustment of our matters with Europe, to remit all fines, &c. incurred under the embargo. Mr. Gallatin, I understand, thinks he is not fully authorized to act, and will lay all the petitions before Congress, although the law gives him full power. An opinion is prevailing with the merchants, that all the Embargo bonds are illegally taken, inasmuch as the laws so specially made did not give Mr. G. sufficient power to instruct the collectors as he did, or that his instructions were not within the letter of the law. This subject will, in my opinion, produce more heated debate than any that will come before Congress—Most of the violations being by the eastern people, (who are generally represented to the enemies of the embargo) they will endeavor to get rid of every penalty, when the Southern Members who are so vexed, will use every exertion to enforce the Laws, or to recover the penalties—Should all fines be remitted, we need never have an Embargo passed again—for there will be no respect paid to it; besides the officers will not use the least exertions to detect persons disposed to carry on a trade vs. such Laws—Hard it would be if the fines be remitted, that congress should affect the interest of the officers whose part of the fines may be material to them."

"There are many truly hard cases for the securities and in such I could not be reconciled to take from an innocent man his

all—and, his family ruined for ever—but there are many cases where too much suspicion of intention is attached to the security as well as the principle."

"We understand that in some cases in this district, the securities have been actually indemnified."

TO THE EDITOR OF THE ENQUIRER.

SIR,  
In your paper of the 16th instant; I gave a demonstration of the properties of a rotatory wheel along a plane, and a general application of the same principle to the motion of the Earth round the Sun, with the consequences resulting from this motion. I shall now proceed to investigate and illustrate these consequences more particularly than I did in my last essay; although my professional engagements permit but a very small portion of time for such purposes.

I am well aware of the ridicule generally attached to those who form new theories and depart from the established systems of the scientific world. There is no one more averse than myself to abandon systems which have been firmly established upon mathematical principles, or no one who holds in higher reverence both the name and works of Newton; yet whenever any other can support his doctrines by geometrical demonstration, I shall always be ready to hear him.

In my last essay, I observed that the velocity of the upper point, was to the velocity of the under point, as twice the chord of the arch of the circle over which they might have moved, to the difference between twice the Diameter and twice the chord of the supplement of that arch; or halving the Ratios, as the chord of the arch of the circle over which they might have moved, to the difference between the Diameter and the chord of the supplement of that arch. From whence without making any other calculation, I concluded that when the arch was nothing, their velocities must be equal; but since after calculating these respective proportions in different points of the Quadrant, I find a consequence of a very different nature and still more surprising will result; for then the velocity of the upper point will be to that of the under point as infinity to nothing; or in plain terms, that after the upper and lower points have described very small arches, the velocity of the upper point may be a million of times greater than the velocity of the under point. This no doubt will appear incredible to many, who even doubted that the upper point of the wheel goes swifter than the under point; to be told that for a certain, although very small space, the upper point of a wheel may move a million of times swifter, than its corresponding under point. Yet the assertion is a correct one, and I am also warranted in the same conclusion by a paper, which I have seen on this subject by Professor Blackburn of Williamsburgh, a gentleman whose mathematical talents I hold in the highest respect.

The under point, therefore, when in contact with the ground may be considered as stationary, and its velocity gradually to increase until it reaches the horizontal line when it becomes equal to that of its opposite point.

When the upper & lower points had each described thirty degrees, I found that the velocity of the upper point was to that of the under point as 5177 to 758. When they had moved over forty five degrees, their velocities were to each other as 7653 to 1867; and when they had described an arch of sixty degrees, they were in the proportion of 10 000 to 5404.

Let us now apply this to the motion of the Earth round the Sun. On the 21st of March the sun entered Aries; therefore the Earth was in the opposite point of Libra; and as the Earth revolves round its axis from West to East, all those points in the Hemisphere next the sun will move slower than the points of the opposite Hemisphere; wherefore the gravity of matter will be most and the centrifugal force least at noon, on the twenty first of March. Again, on the 22nd of September the sun enters Libra and the Earth Aries; therefore the gravity of matter will be most & the centrifugal force least at midnight on the 22nd of September, or at noon on that day the gravity of matter will be least and the centrifugal force greatest. The reason of this will readily appear from examining the second and third corollaries in my last essay.

Wherefore it appears, that from the 21st of March until the 22d of September, that particular moment when gravity is most, has a variation of a few minutes later every twenty-four hours, and in like manner it has a similar variation from the 22d of September until the 21st of March.

To calculate the particular hour when gravity is most for every day in the year, several circumstances must be taken into consideration, viz: the inclination of the axis of the earth to its orbit; her irregular progressive motion, and the particular species of cycloid which the earth describes. These would lead to calculations which my present time does not permit.—But to compare the effect, which the earth's rotation has upon the tides, with the effect which the moon produces, it is requisite that these calculations should first be made, and a table constructed, shewing the proportion between the velocity of the points of the opposite hemisphere of the earth for every day and hour in the year.

In the same manner also as Sir Isaac Newton has calculated (Prop. XX. Book III. of the Principia) the length of the pendulum for the several degrees of latitude from the poles to the equator, and the weights of bodies for these latitudes; so likewise a table may be constructed, exhibiting the length of the pendulum and the weights of bodies, for every hour and minute of the day through out the year. It has been frequently observed, that the best pendulums have varied in the twenty-four hours of the earth's rotation; but the cause has always been attributed to a change of temperature in the atmosphere, and not to a change of gravity in matter.

The atmosphere is affected by the earth's rotation in two ways. It is affected in the same manner as the tides by the gravity of the matter, which composes it, always changing. It is also affected by the action of light (which may be considered a fluid) upon its rotatory motion; since this motion is different in the opposite parts of the atmosphere. I cannot explain this better than by quoting the enunciation of the 52d Prop. of the 2d Book, and the first corollary of Newton's Principia.

Prop. 52d.—If a solid sphere, in an uniform and infinite fluid, revolves about an axis given in position with an uniform motion, and the fluid be forced round by only this impulse of the sphere; and every part of the fluid perseveres uniformly in its motion:—I say, that the periodic times of the parts of the fluid, are as the squares of their distances from the centre of the sphere.

Cor. 1st.—If the sphere revolves in the parts of the fluid about the axis of the globe are reciprocally as the squares of the distances from the centre of the globe, and the absolute velocities are reciprocally as the same squares applied to the distances from the axis.

An ingenious writer in the last "Visitor," affirms, that the Problem, respecting the wheel, is nothing new, and refers to the articles *Roulement, Roue d'Aristote, Cycloide, Trochoide* in the French Encyclopedie, in the possession of Mr. Chevalier.—Much as I respect the talents and erudition of this writer, with whom I have the pleasure of being acquainted; yet I must beg leave to differ from him on this point. Another gentleman in Richmond, who is also possessed of the French Encyclopedie, has been so obliging as to favor me with the volumes containing these articles, which I have perused, and although a very particular account of the cycloid is given in them, yet the proposition in question, "that the upper part of a wheel, revolving along a plane, moves swifter than the under part," is nowhere mentioned. But that the curious may judge for themselves, I have transcribed those passages which most apply to the present question, and to prevent any dispute respecting the translation of terms, I have thought it better to give them in French than in English; as it is to be presumed, that these readers who are interested in this subject, understand that language.

Under the article *Cycloide*, there are the following observations:

"La Cycloide est une courbe assez moderne; et quelques personnes en attribuent l'invention au P. Merenne, d'autres a Galilee; mais le docteur Wallis pretend qu'elle est de plus ancienne date; qu'elle a été connue d'un certain Borilias vers l'année 1500 et que le Cardinal Cusa en avoit même fait mention long temps auparavant, c'est a dire avant l'an 1451."

"Il est constant, remarque M. Formey, que le P. Merenne donna le premier la formation de la Cycloide, en la proposant a tous les géometres de son temps, lesquels s'y appliquant a l'envi, y firent alors plusieurs découvertes; en sorte qu'il étoit difficile de juger a qui étoit dû l'honneur de la premiere invention. Delà vint cette celebre contestation entre M. M. de Bernal, Torricelli, Descartes, Laloeia, &c. qui fit alors tant de bruit parmi les savans."

"Depuis ce tems-là a peine a-t-on trouvé un mathématicien tant s'en peut distinguer, qui n'ait éprouvé ses forces sur cette ligne; en tâchant d'y découvrir quelque nouvelle propriété. Les plus belles nous ont été laissées par M. M. Pascal, Huyghens, Wallis, Wren, Leibnitz, Bernoulli, &c."

"Cette courbe a des propriétés bien singulières. Son identité avec sa développée, les chutes en reins égaux par des arcs inégaux de cette courbe et la plus vite descente, sont les plus remarquables."

"Ceux qui voudront s'instruire dans un plus grand detail de l'histoire de la cycloide pourront consulter la *vie de Descartes* en 4vo. par M. Baillet, liv. iv. chap. xii. xiv. xv. Il résulte de l'histoire assez étendue que cet auteur en donne."

"1. Que le premier qui a remarqué cette ligne dans la nature, mais sans en pénétrer les propriétés, a été le P. Merenne qui lui a donné le nom de *roulette*."

"2d. Que le premier qui en a connu la nature, et qui en a démontré l'espace, a été M. de Bernal qui l'a appelée d'un nom tiré du grec, *trochoide*."

"3d. Que le premier qui en a trouvé la tangente, a été M. Descartes, et presque au même tems M. de Fermat, quoique d'une manière défectueuse; après quoi M. de Bernal en a le premier mesuré les plans et les solides et donné la centre de gravité du plan et de ses parties."

"4th. Que le premier qui l'a nommée *cycloide*, a été M. de Baugrand; que le premier qui se l'est attribuée devant le public, et qui l'a donnée au jour, a été Torricelli."

"5th. Que le premier qui en a mesuré la ligne courbe et ses parties, et qui en a donné la comparaison avec la ligne droite, a été M. Wren, sans la démontrer."

"6th. Que le premier qui a trouvé le centre de gravité des solides, et demi-solides de la ligne et de ses parties, tant autour de la base qu'au tour de l'axe, a été M. Pascal; que le même a aussi trouvé le premier le centre de gravité de la ligne et de ses parties; la dimension et le centre de gravité des surfaces, demi-surfaces, quart de surfaces, &c. décrites par la ligne et par ses parties tournées autour de la base et autour de l'axe; et enfin la dimension de toutes les lignes courbes des cycloides allongées ou accourcies.—M. Pascal publia ces propriétés de la cycloide dans un petit livre imprimé au commencement de 1653, sous le titre de *traité de la roulette* et sous le nom de A. d'Etionville. Il est fort rare, le libraire n'en ayant tiré que 120 exemplaires."

The remainder of this article is occupied by explaining the application of the Cycloid to the Pendulum by M. Huygens.

Under the article *roue*—The paragraph most applicable to the present question is the following—

"Le seul et unique mouvement qu'aît la roue, est un mouvement curviligne, composé du mouvement progressif et du mouvement circulaire; ce qu'on peut voir aisément en fixant un crayon sur la roue de manière qu'il marque sa trace sur la muraille pendant que la roue tourne; car la ligne qui se trouve tracée alors est une vraie courbe; cette courbe s'appelle par les géometres *cycloide*, et elle est autant moins courte que le crayon a été placé plus proche de l'axe."

The article *Roue d'Aristote* is only an explanation of the problem mentioned in the Visitor suggested by Aristotle. That "during a complete revolution of the wheel, a line equal to the circumference thereof is described on the ground; why then, during one revolution also of any concentric circle within the wheel is a line described by that circle, greater than its circumference?"

Under the article *Roulement* there is the following—

M. de Fontenelle dans sa pluralité des mondes, veut expliquer ces deux mouvements par la comparaison d'une boule qui roule sur un plan en même temps qu'elle avance. Mais le mouvement progressif de la boule produit nécessairement son mouvement de rotation, au lieu qu'il n'est pas sur que la rotation des planetes sur leurs axes vienne du même principe que leur révolution annuelle; et que ces deux mouvements paraissent même entièrement indépendans l'un de l'autre.

But in all this I cannot find the proposition respecting the wheel which has lately agitated Richmond. The properties of the Cycloid upon which it depends are explained; but the idea itself, that the upper part of a wheel moves swifter than the under part, is nowhere suggested. Nor do I believe I ever was suggested, for if it had, neither Sir Isaac